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**Robbins**(10) **Pub. No.: US 2014/0176528 A1**(43) **Pub. Date: Jun. 26, 2014**(54) **AUTO-STEREOSCOPIC AUGMENTED  
REALITY DISPLAY**(71) Applicant: **MICROSOFT CORPORATION,**  
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Redmond, WA (US)(21) Appl. No.: **13/722,917**(22) Filed: **Dec. 20, 2012****Publication Classification**(51) **Int. Cl.**  
**G06T 19/00** (2006.01)(52) **U.S. Cl.**CPC ..... **G06T 19/006** (2013.01)USPC ..... **345/419**(57) **ABSTRACT**

In embodiments of an auto-stereoscopic augmented reality display, the display device is implemented with an imaging structure that includes a waveguide for see-through viewing of an environment. The waveguide also transmits light of a virtual image that is generated as a near-display object to appear at a distance in the environment. The imaging structure includes switchable diffractive elements that are integrated in the waveguide and configured in display zones. The switchable diffractive elements are switchable to independently activate the display zones effective to correct for an accurate stereopsis view of the virtual image that appears at the distance in the environment.

